

YOUR INSIDE SOURCE.

Master Final Cut Studio® and Digital Media *with* LarryJordan.biz

[Home](#) [About Us](#) [Training](#) [Editing Library](#) [Resources](#) [Store](#) [Email Support](#) [Contact](#) [Search](#)



Sign up for Larry's *FREE*
Monthly Newsletter!

Larry Jordan's Monthly Newsletter

Editor: Larry Jordan
Issue #67 -- April, 2010

Welcome to the latest edition of my monthly Final Cut Studio newsletter for April, 2010.

The goal of this newsletter is to provide information helpful to the interested user of Final Cut Pro. This newsletter publishes each month, past issues are available in my store. All software references are to Final Cut Studio (3) unless otherwise noted.

Please invite your friends to visit my web site -- www.larryjordan.biz. There you'll find daily tips, the latest industry news, and almost 500 articles and tutorials to help you get the most out of Final Cut Studio!

And, if you haven't already, please subscribe to this free monthly newsletter [here](#).

We are getting our social media act together! Follow us online:

- [Larry on Facebook](#)
- [Larry on Twitter](#)
- [Latest Industry News](#)
- [Larry Jordan's Blog](#)

NEWSLETTER CONTENTS

- [Welcome](#)
- [Gear Report: Covering the NAB Show for Digital Production Buzz](#)
- [Free Video Tutorial From Larry. Plus New Tutorials and Bundles!](#)
- [Review: Data Robotics Drobo Elite](#)
- [Naked Mice Need Nice Rugs](#)
- [Did You Know There's a Fiber Optic Connection Built Into Every Mac?](#)
- [Three NEW Webinars From Larry Coming in May](#)
- [Jittery Video Playback](#)
- [Spotlight Indexing](#)
- [Thoughts on Video Streaming](#)
- [Thoughts on Final Cut Server](#)
- [Favorite iPhone Apps](#)

PASSING THOUGHTS

- [Fast DVD Burning of HD Material](#)
- [Nest Warning](#)
- [Posting on Kenstone.Net](#)
- [A Request of Apple](#)

READER MAIL

- [Pixel Aspect Ratios Are Driving Us Nuts](#)
- [Importing 16:9 Videos Into iDVD](#)
- [Monitoring Audio](#)
- [Recording Audio Levels](#)
- [Creating Surround Mixes](#)
- [Accessing The Inaccessible](#)
- [What To Buy, What To Buy...](#)
- [Audio Sync Drift](#)
- [Painting The Walls](#)
- [A New Keyboard Shortcut](#)

QUESTIONS LARRY NEEDS HELP WITH

WRAP-UP

WELCOME

Those of you who obsess over the calendar will probably have already noticed that I've called this the April issue... and it's May already. All I can say is that I had the best of intentions.

In this issue, I have a detailed report on how we covered the [2010 NAB Show for the Digital Production Buzz](#). I'll tell you what we did, what we used, what worked, and what didn't. If you are a gear-head, I think you'll like this report.

Next, I'm delighted to offer every reader of this newsletter **a free [video tutorial](#)**. We've created some great tutorials -- I want to encourage you to try one, then come back and [buy more](#).

Then, we have a flock of new things to talk about and plenty of discussion for this month.

I'm also delighted to announce a new series of [webinars](#) -- specifically focused on providing in-depth information on a particular subject without you needing to travel anywhere. We are also working on other new training that I'm hoping to announce later this month.

It will be an exciting spring and I'm looking forward to sharing it with you. As always, I'm grateful for all your [letters and comments](#). They are what make writing this newsletter fun.

NOTE: I've fallen way behind in my reader mail this month. If I didn't cover your question, keep an eye on [my blog](#). I'll be answering questions there, as well. I'm sorry it is taking me so long. If I didn't publish your question, I'll get to it as fast as possible.

[[Go to Top](#).]

GEAR REPORT: COVERING THE NAB SHOW FOR DIGITAL PRODUCTION BUZZ

Friday, April 9, we loaded up our rented Buzz Mobile Studio and trundled our way across the desert to Las Vegas and the 2010 NAB Show.

In this report, I want to describe what we did, and how it turned out.

NOTE: For a list of all our shows and coverage, visit: www.nabshowbuzz.com.

This was our second year as the **Official Podcast for the NAB Show**. Our goals for the show were to create at least six hour-long programs and at least 35 five-minute News Briefs. By the time all the dust had settled, we had created 10 hours and eleven minutes of long-form programming and 37 News Briefs containing roughly 240 minutes of news. Whew -- more than 14 hours of programming produced in a week!

It would not have been possible without our crew of 22 staff and volunteers.



We setup into a 20x20 foot booth, with the broadcast table at the back, editors on the right and reporters on the left. We had very limited Internet access provided by the venue, so we supplemented it by a series of cell-phone-based USB wireless devices for key computers.

Last month, I wrote an article detailing our technical gear (you can [read it here](#)). The only changes we made from that article were in experimenting with [Vericorder](#) technology using iPhones for news-gathering, and testing fiber optic digital cabling for our final signal path. More on these in a bit.

One of the lessons we learned last year was the importance of a good monitoring system for key members of the staff. Last year, we had speakers in the booth, but no staff headsets. This year, we brought the speakers, plus headset set amps and headsets so that we could have up to eight people all listening to the shows at the same time.



The content for our News Briefs was gathered by a team of reporters racing around the trade show floor and covering the convention. They captured sound bites using [Marantz 661PMD](#) digital recorders and Vericorder-equipped iPhones. We used the Marantz recorders last year, along with a [Shure SM58](#) mic, and they continued to work great. Fast, reliable, and the WAV files they created were easy to edit directly in Soundtrack Pro.

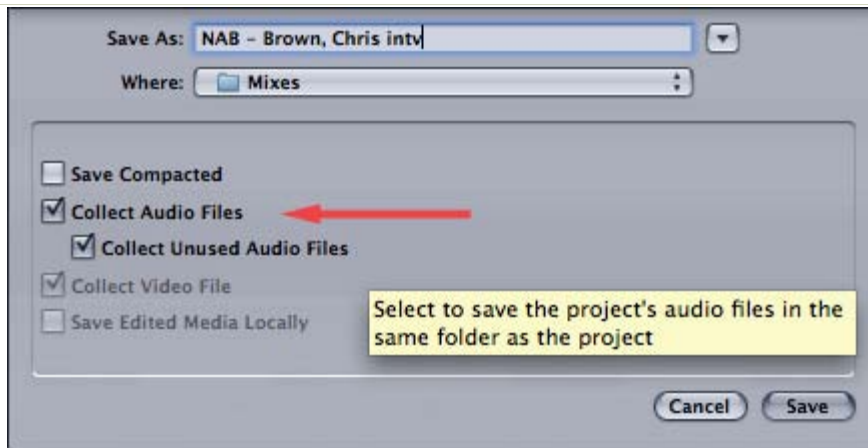
All our audio editing was done in Soundtrack Pro, feeding a central server (a Mac Mini RAID) with storage on a Drobo Elite (see the [review later in this issue](#)). Once we figured out a naming and file storage convention that worked - which took us a day - technically, the system worked flawlessly. (Well, except for a bad Ethernet cable that kept taking our server off-line. Once we found that problem, which took a couple of hours, everything else was seamless.)



While the reporters were gathering news, I was busy in the booth doing extended interviews with key industry leaders. In the booth, I used three Beyer-Dynamic headset mics, feeding into three [Aphex 230 Master Voice Channel Processors](#) for pre-amp and audio processing. (Sigh... they helped us sound so nice!)

From the Aphex, the signal went into an [Alesis MultiMix 8 FireWire](#) eight-track mixer and were output via FireWire as three discrete audio channels recorded on my MacBook Pro laptop using Soundtrack Pro.

Prior to the show, I created a template for STP that preset audio inputs, applied standard filters and settings, and had the track layout I wanted to use. Then, at the start of each interview, I would open that document, save it under a different name, and record the session.



Each session was recorded and saved in a folder named after the company and the person speaking. I also collected all audio files from that recording (using **Save As...**) so that I could move all the files associated with that recording simply by dragging the folder from one place to another.

(For a complete tutorial on how we used Soundtrack Pro for our editing, [check out this tutorial bundle](#). We created these four movies specifically to train our editors.)

Each show was created by editing each interview as a stand-alone AIF file, then I recorded the open and close from our booth on the show floor, and stitching it all together in Soundtrack Pro. The final mix was output as an AIF file, compressed into both MP3 and AAC files for posting to the web, and delivered to Greg Clarke, who handled all our web posting for final uploading to our web site and iTunes.



Our workflow for the news was different. Each reporter kept track of all their interviews on a written field log form, along with the business card of the person they talked with. Since a digital recorder creates a single file for every recording, the reporters were told to only record one file for each interview. (To keep things even simpler, we recorded everything using one mic into a mono file.)

When they were done gathering interviews, they returned to the booth, where our operations manager, Laura Peters, copied the files from the recorder to the server, renaming files based upon our naming convention and creating backups -- just in case. Then logged all the interviews into a database so we could track them later. (Which was a good thing as we accidentally erased one file during production.)

From there, the editors took the source file and edited it into a sound bite. This edited AIF file was then reviewed by the show's producer, who, along with two writers, wrote the scripts; including lead-ins to each interview.

The script was delivered to me as a print-out. We debated going entirely paperless for the show, but developing a network-based database for scripting and clip tracking wasn't worth the effort given that we needed to go from setup to full-operation to tear-down in four and a half days.

I then narrated the script live to our streaming server, playing all the sound bites manually on my laptop using QuickTime player. The audio traveled from my computer to a separate channel on the Alesis, into an Aphex 320D Compellor for final audio processing before traveling to the streaming server.

The audio was recorded at the streaming server during the broadcast - just in case I made a mistake during the production.

Greg Clarke, our streaming engineer, cleaned up the recording, if necessary, compressed it into both MP3 and AAC for posting, and the news hit the web.

During the course of the four days we originated news from the trade show floor, we generated 225 interviews, edited 180 of them, and broadcast 37 News Briefs containing 140 interviews.

THINGS WE LEARNED

Smart decision #1: We decided to go with an all-hard-wired network. There's so much RF and wireless activity at the NAB Show, we wanted to avoid any problems, so we built our own network. 16 computers into one NetGear switch, feeding an OS X 10.6 Server running on a Mac Mini, with files stored on a Drobo Elite. Worked great. (At one point I measured the server CPU load. Under full production we used less than 25% of the server.)

Smart decision #2: Noise canceling headsets for our editors. This reduced the ambient noise from the hall and made it easier to hear what they were editing.

Smart decision #3: Lots of headsets to monitor news feeds and recordings. PR people, team members, engineering, and producers all needed to listen at some point. We had almost ten monitoring headsets available at any time.

Smart decision #4: We planned our recording schedule so that we didn't have to do too much during the first day. This gave us plenty of time (well, OK, barely enough time) to get the system setup, debugged, people oriented, trained, and figure out where our planning failed so we had time to solve problems before the madness hit.

Smart decision #5: We assembled a REALLY good crew who got into the spirit of the event, worked tremendously hard, and turned out solid results very, very quickly.



Almost everything we did worked fine. But there were some glitches.

Glitch 1: Signal path. The Aphex Compellor has both analog and AES/EBU digital outputs. In talking with the folks at Aphex (who are wonderful to work with), we decided to use the digital output. This required that we use a Toslink converter to take the AES signal and convert it to fiber optic for input into the Mac (see the article later in this newsletter about [Toslink](#)).

We bought a [Hosa S/PDIF Optical to AES/EBU Digital Audio Interface](#). For the fifteen minutes that it worked, it was great. After that, it would arbitrarily drop signal - generally 5 to 50 seconds after we started recording. We could never get the converter to work properly. So we gave it up and went back to all analog. This meant that we were not able to fully utilize the power and control of the Compellor.

Next year, I want to tackle this problem and see if I can figure out a solution. An all-digital signal sounds better and the Compellor REALLY handles level changes nicely.

Glitch 2: We needed a better intercom system. When you are doing live events, it is critical that all team members be able to hear AND talk. We had really good monitoring, but the ability of team members to easily communicate with each other was very limited.

THOUGHTS ON USING VERICORDER

[Vericorder](#) provided two reporters for us to use during the event, so that they could showcase their iPhone software, as well as test their new video recording software. The two reporters (Brian Pellot and Erica Zucco) worked really hard tracking down interviews. We only had one problem with the system. On the last day, the external microphone for one unit was assigned to a different project and unavailable to us. So, the reporter used the built-in mic of the iPhone. The resulting quality was very poor, the iPhone wasn't able to filter out the ambient noise of the event the way an external mic could. The interviews for the last day were unusable.

However, the built-in audio editing capability of the Vericorder system, in the words of producer Cirina Catania: "we were grateful because the pieces [edited on the Vericorder] actually cut down on our workflow time."

We also has some initial difficulties figuring out how to capture the audio files recorded on the iPhone to our computer network. Once the files were in the system, they were as easy to edit as any other files. But getting them in required a dedicated computer, some careful thinking about setup, and a fairly technical operator.

I want to say a special thank-you to **Gary Symons**, CEO of Vericorder, for providing both iPhones and software, plus the services of Brian and Erica for our NAB coverage.

SPECIAL THANK-YOUS

All-in-all, this year was very successful. I want to thank [Marantz](#) and [Aphex](#) for the loan of their gear. [NAB](#) for providing us a booth and related services to use as home base. And our sponsors for all our broadcasts: [Adobe Systems](#), [Data Robotics](#), [Focal Press](#), [Pond5](#), and [Carl Zeiss lenses](#). Without their financial support, this would not have been possible.

I also want to thank our team of staff and volunteers. It was hard work and they did a great job:

- **Producer:** Cirina Catania
- **Associate Producer:** Debbie Price
- **Associate Producer - News:** Paul Kim
- **Operations:** Laura Peters
- **Special Correspondents:** Michael Cowan, Philip Hodgetts, Michael Kammes, Ben King, and Bruce Nazarian.
- **Reporters:** Ben Balsler, George Kennedy, Hector Mata, Roz McNulty, Brian Pellot, Carol Tenney, and Erica Zucco.
- **Editors:** Rodney Mitchell, Adam Bedford, Julia Green, Victor Noerdlinger, Marina

Thompson, and Zibo La.

- **Engineering and streaming:** Greg Clarke.

It was a GREAT team!

[[Go to Top.](#)]

FREE VIDEO TUTORIAL FROM LARRY, PLUS NEW TUTORIALS AND BUNDLES!



I've created **five more video tutorials** -- and I want to give you one of them for **FREE!**

First, as we were getting ready for NAB, I created a series of four new tutorials on [working with multi-track audio in Soundtrack Pro](#). Over 90 minutes of detailed instruction, contained in four new movies.

Second, from now until May 15, I'm offering my latest tutorial **FREE** to readers of this newsletter. The tutorial is: **Uncovering Hidden Shortcuts in Final Cut Pro 7**. (TRT: 3:20 -- 8.8 MB ZIP file containing a QuickTime movie. [Click here](#) to download it.)

My goal is that once you see what my tutorials are like, you'll purchase more.

For that reason, I've created more than 60 of my video tutorials and bundles. These short, focused titles can solve your technical questions and get you up and running fast.

Even better, **SAVE MONEY** and buy bundles!

- [Recording, editing, and outputting multi-track audio using Soundtrack Pro](#) - **NEW!**
- [My Favorite Final Cut Pro Tutorials](#)
- [Video Compression](#)
- [Soundtrack Pro Bundle #1](#)
- [Soundtrack Pro Bundle #2](#)

With more than 60 tutorials available, choose from the [complete list of my video tutorials here](#). Most tutorials are **priced at \$4.99 each**.

With all these titles, there's sure to be a solution to your nagging Final Cut problems. Most titles run 5-10 minutes and can be downloaded instantly.

UPDATE - May 7, 2010

Nik Coleman writes:

Four damn years of cursing at the 'missing' playhead when I zoom in or out. You just fixed it with this 'hidden shortcut' tutorial.

You remain, The Very Best.

Thanks Larry.

Larry replies: Thanks for writing, Nik. This is what I try to do with ALL my tutorials. Check out some of the others and you'll see what I mean.

More titles coming every month! Take a look and [order today!](#)

[[Go to Top.](#)]

REVIEW: DATA ROBOTICS DROBO ELITE

Note: For my policy on reviews and disclosure, [please read this article](#).

As you read earlier in this issue, Data Robotics was one of our sponsors for our NAB Show coverage this year. I've been a fan of their products for a while, and decided that the show this year gave us a great opportunity to put one of their latest products to the test - the Drobo Elite.

So, I asked Data Robotics to loan us a unit to review and use during the NAB Show. The short answer is that the unit performed flawlessly, but getting it setup was not as easy as I expected.

WHAT IS THE DROBO ELITE?

Data Robotics makes a family of products under the brand name of Drobo. This is the fourth of their products I've reviewed.



- * [Click here](#) for my review of the Drobo
- * [Click here](#) for my review of the Drobo S
- * [Click here](#) for my review of the Drobo Pro

The Drobo Elite is the high-end of the Drobo product line. Designed for small to medium businesses that need flexible, RAID-protected storage across multiple servers or computers.

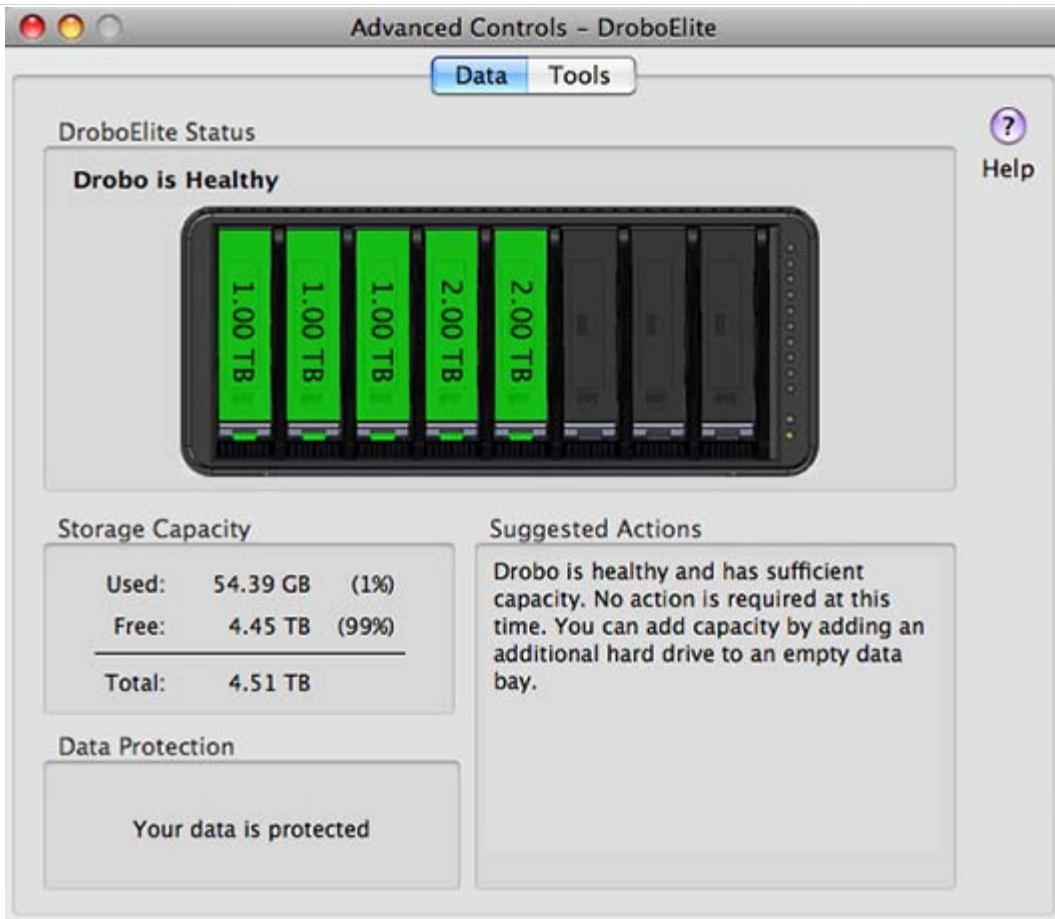
Following the lead of the Drobo Pro, the Drobo Elite attaches to your network via iSCSI. This protocol allows you to connect the Elite to a network switch, which allows the device to be accessed over the network, rather than connect directly to a computer.

NOTE: I have become a fan of iSCSI. While the speed is limited to the speed of your network, if you are running your data through a 1 gigabit switch, you should expect data rates greater than 80 MB/second. (In an ideal environment, the maximum data rate is 128 MB/second, but latency in the switch and contention across the network prevents speeds in excess of 100 MB/second.)

The even bigger benefit to iSCSI is that your data comes in via your Ethernet port - along with Internet connectivity - they easily share the same wire. This means that I no longer have to worry about what ports are on my laptop or getting an interface card for a G-5 or MacPro. As Apple continues removing ports, the ability to be sure that you can access your data via the one port they WON'T remove - the Ethernet port - provides great peace of mind.

All Drobo's are known for their expandability and the ability to protect your data if one hard drive dies (Drobo calls this "Beyond-RAID," because traditional RAID's do not allow you to swap out a smaller hard drive for a larger one without first having to remove all your data to separate storage, then reformat the RAID and replace your data when the swap is complete.)

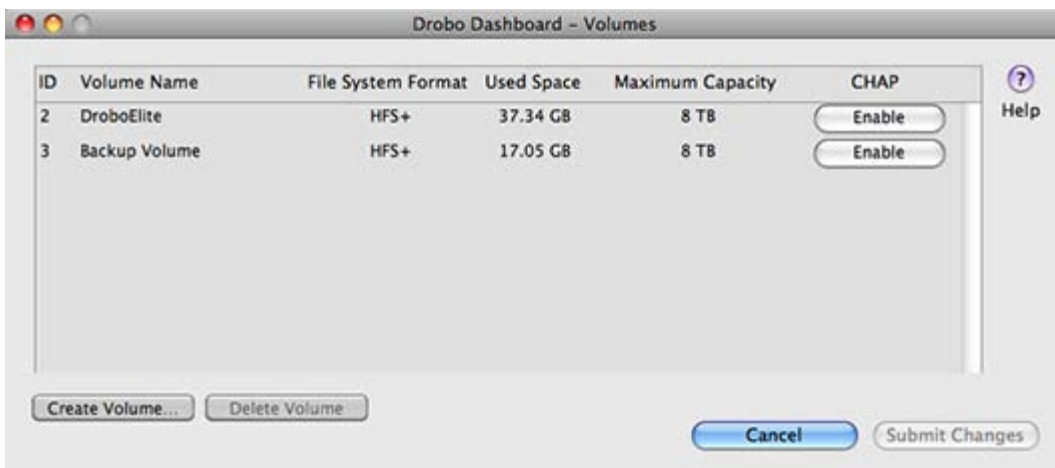
Where the Drobo Elite excels is the ability to create multiple "Smart Volumes" in one RAID. These scalable volumes allow different computers or servers to attach to different volumes on the same unit. This allows you to share a single storage unit between multiple devices.



Part of the expandability the Drobo Elite provides is the ability to mix-and-match hard disks. The hard disks don't have to match in size, speed, or manufacturer. As one fills up, you can replace it with a larger one. Cool.

And, since the Drobo allows you to insert up to eight hard disks, this provides up to 16 TB of storage in one unit, depending upon the size of the hard disks you use.

For traditional file sharing, you still need to attach the Elite to a standard file server (unlike the new Drobo FS, which directly attaches to the network and acts as it's own server).



However, let's say you have three servers. You can create three partitions (Smart Volumes) on the Elite, and assign a partition to each server. It acts like direct-attached storage, without actually having the unit attached to your computer.

Even better, using Drobo Dashboard, you can unmount a volume on the Elite from one computer, and quickly mount it to a computer in the next room, allowing you to quickly migrate

projects from one computer to the other, without changing any connections to the drive, or moving the drive itself.

To make file transfers even faster, the Drobo Elite comes with two Ethernet ports, allowing you to use Jumbo Frames on your Ethernet network. While I didn't test this, as not all computers support Jumbo Frames, the increase in speed is significant.

[The administrative username and password are not set on this Drobo. Click here to password protect this Drobo.](#)

Mount	Volume Name	File System Format	Used Space	Maximum Capacity
<input checked="" type="checkbox"/>	DroboElite	HFS+	37.34 GB	8 TB
<input checked="" type="checkbox"/>	Backup Volume	HFS+	29.45 GB	8 TB

You can also password protect the drive so that the settings can't be modified. While I didn't use this, I can see why it would be helpful in larger shops to prevent over enthusiastic editors from mucking up the system.

INITIAL THOUGHTS

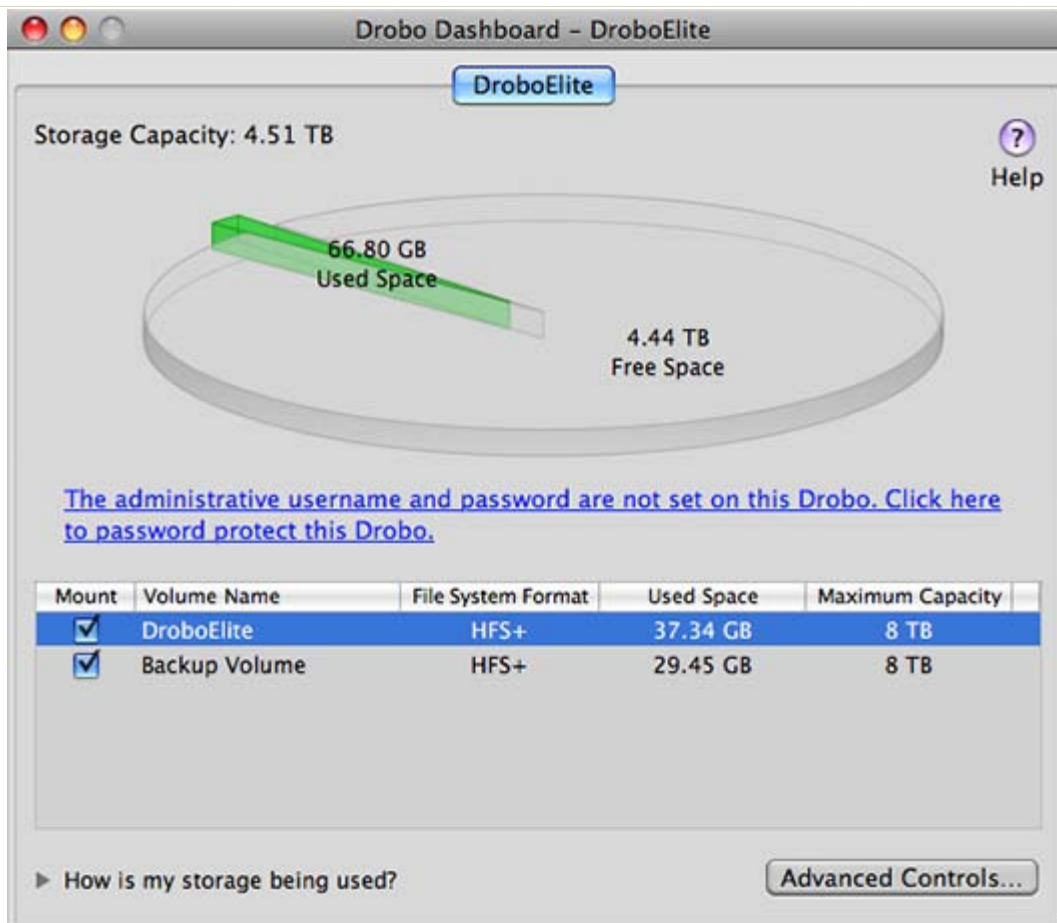
I like the fact that the on/off switch is a rocker switch that you can't turn off by mistake. To turn the unit off, you need to FIRMLY press and hold the rocker switch for several seconds. I like this. What I would like even more is if Data Robotics would figure out a way to keep the power cord from accidentally disconnecting from the unit.

Data Robotics continues to find ways to make their units quieter. If you are accustomed to the racket a normal RAID makes, you'll be delighted with this. If, on the other hand, you expect it to be really quiet, you'll be disappointed. My recommendation is that, since both the Drobo and your computer attach to the network via Ethernet, you don't need to have the Drobo in the same room as your computer. Put it somewhere where you won't hear it -- like near your servers.

And, something very important to a geek, it has some very cool flashing lights - green, blue, yellow, and red. Even better, the lights let you read the status of the unit at a distance.

THE GOOD NEWS - PERFORMANCE

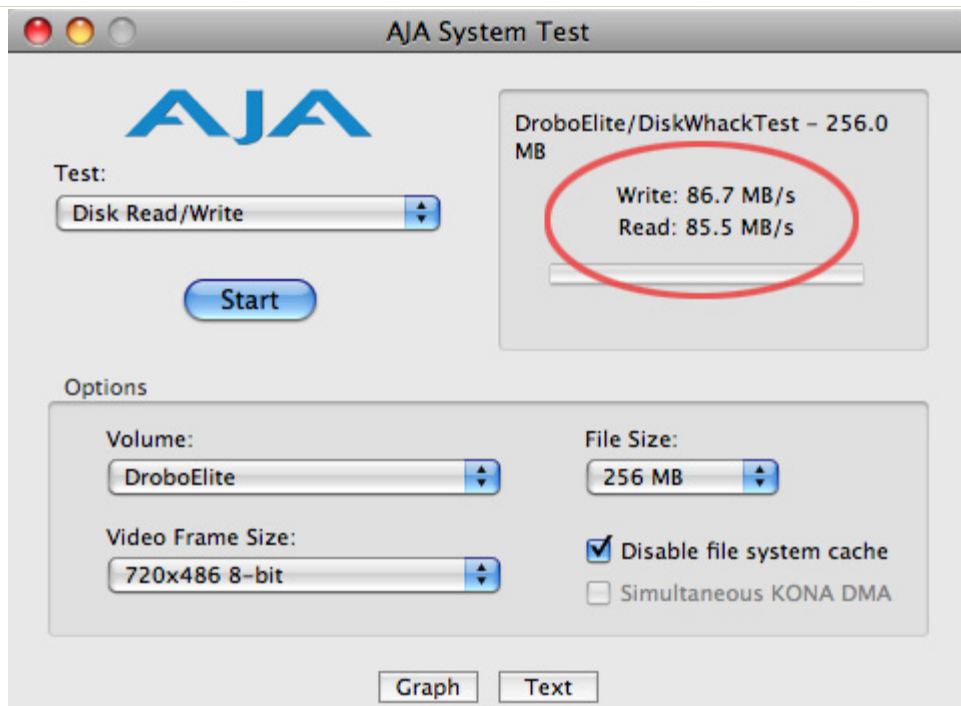
I installed five hard drives, of varying sizes, into the Elite for a total of about 4.5TB of protected storage.



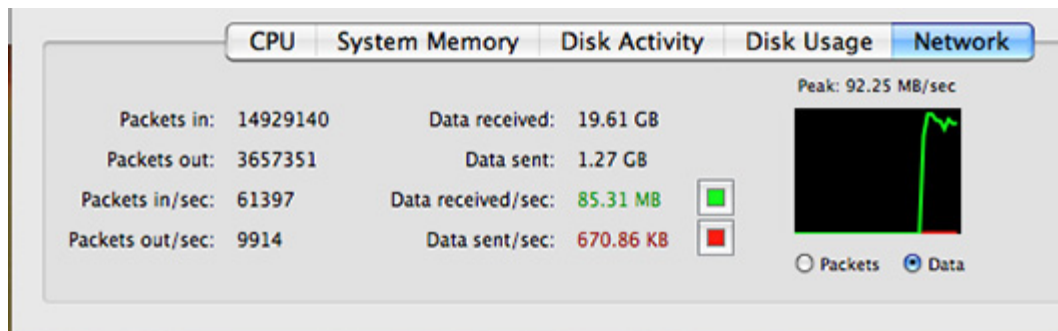
As is the case with all Drobos, you manage the system using Drobo Dashboard. However, unlike other Drobo's, I divided this storage into two Smart Volumes. The Drobo Elite volume I attached to a server, and the Backup volume I directly connected to my laptop. This gave me two separate volumes, only one of which was accessible over the network, so that in the event someone tried to trash a file, they would not be able to trash, or even see, the safety backups we had created.

The Drobo Elite has two connections on the back - USB, which is required for setup, but way too slow for any use in production, and iSCSI.

When attached via a server, the speed of the unit depends upon the speed of the server. However, during my tests using a Mac Mini (not the fastest server in the world), I was regularly getting more than 50 MB/second from the drive.



When attached directly to a computer, though, my speeds were comparable to the Drobo Pro - 85 MB/second for both reads and writes. This is plenty fast enough for editing most video formats, including multi-cam work.



Copying files from the Drobo to a local hard drive averaged about 86 MB/second. The screen shot above shows the speed the data came in from the network (because the drive attaches via the Ethernet cable). Writing to the internal hard drive of my MacPro was equally fast. It copied 10 GB of data in little over a minute.

Once the system was setup, access was as easy as accessing any other hard disk. But, getting it setup was a real challenge.

THE BAD NEWS - SETUP REQUIRES PAYING ATTENTION!

Data Robotics sent me the unit about a week before I needed it for NAB, so I had time to get it setup and tested.

Here's the first thing I learned: **YOU MUST READ THE MANUAL** before you try to set this up. I managed to do this completely wrong and cost myself several days of hair-pulling.

I tried installing this to a headless server using Apple's Remote Access - bad idea. The Drobo Elite needs to be directly connected to the computer during setup via USB. Don't attach it to your network switch until installation is complete. Don't try to access it remotely until setup is complete. Connecting the Drobo to your network before installation is complete will take down your network. I speak from personal experience here.

NOTE: If all the lights on the front of the unit are red, it means that the Drobo can

not see your computer. To resolve this, open the manual. Read the instructions...

So, to install the unit:

1. Connect the Drobo Elite to computer with a monitor using USB. (Don't try to install this remotely.)
2. Download the latest version of Drobo Dashboard and install it, plus any necessary firmware upgrades to your unit.
3. Since this will be a network device, you need to assign it an IP address compatible with other devices on your network. You do this in Drobo Dashboard.
4. After that, follow the directions. (Did I mention you need to read the manual? Well, you do.)

A FEW OF WARNINGS

Hard drives from other Drobo units are NOT compatible with the Drobo Elite. Start with fresh drives.

The Drobo Elite automatically creates an Unformatted volume upon startup - this needs to be either formatted or deleted before the unit is ready for use.

There is no way to get the Drobo Elite to auto-mount to a server in the event of a power failure. This means that you will need to access your server to reconnect the drive.

Don't use the Drobo Dashboard to eject and shutdown the unit. A much better way is to Eject the drive from your desktop, then, after it has dismounted, press and hold the power switch. This is a safer way to remove the drive.

FINAL THOUGHTS

The Drobo Elite deserves its ranking atop the Drobo family. However, it is not for everyone. If you need a fast drive, with the expandability that Drobo is famous for, and want to connect to the drive via your network port, get the Drobo Pro. For many smaller shops, this will be the best choice. The speed difference between the two units is negligible. For me, and the editing work we do around here, the Drobo Pro meets our needs the best.

If you need a fast, expandable drive that fully protects your data with the ability to move it between edit bays, or provide protected storage to multiple servers, or take advantage of automatically expandable Smart Volumes, the Drobo Elite should be on your short list of units to review.

The Drobo Elite worked flawlessly for us during NAB. We connected it to the server, turned it on, and seven days later turned it off. In the meantime, we were playing files directly to air from the Drobo via the server. 16 users all hitting it at once. Never dropped a beat. Fast, secure, and, best of all for a hard drive, invisible.

[[Go to Top.](#)]

NAKED MICE NEED NICE RUGS

Yes, it's true. I've learned that some computer mice are being forced to slide around on hard, cold tables. Poor mice. However, a solution is close at hand.

I've created the latest in mouse-designer fashion -- a warm, toasty, mouse-pad covered with over 40 Final Cut Pro keyboard shortcuts.

So, now your mouse gets to keep its red laser nice and warm on these cool spring nights, and you get some of the most useful, yet little-known, keyboard shortcuts all assembled in one easy-to-find



place.

This mouse-pad is currently warming the little feet of the mice of some of the most famous editors and filmmakers in the world. (No, I can't tell you who, but if I did, you'd be impressed.)

Newly redesigned for 2010, this mouse-pad has all the conveniences - a mouse-friendly top surface, a grip-the-table-to-death bottom surface, a thick-and-bendy middle, lots of interesting stuff to read, and a cute design that will make your mouse feel especially loved.

What's not to like? (You purchased some clothes for yourself recently... isn't it time to do the same thing for your mouse?)

Plus, it has a GREAT low price -- less than \$10!

Support your mouse! Buy your copy today - click here!

[[Go to Top.](#)]

DID YOU KNOW THERE A FIBER OPTIC CONNECTION BUILT INTO EVERY MAC?

Nope, I didn't either. I didn't discover it until we started our technical preparation for NAB this year.. It's called **TOSlink**.



(Image courtesy of Hustvedt.)

According to Wikipedia, "TOSLINK or Optical Cable is a standardized optical fiber connection system. Its most common use is in consumer audio equipment (via a "digital optical" socket), where it carries a digital audio stream between components such as MiniDisc and CD players and DAT recorders."

TOSlink was originally created by Toshiba to connect their CD players. Basically, it transmits digital signals between devices using fiber optic cables. And, as you can see below, it uses a square plug to connect to the gear.

NOTE: S/PDIF optical and TOSlink are two words that mean the same thing.

I learned about this in talking with Wayne La Farr, product specialist for [Aphex](#). We were setting up the studio gear for our NAB coverage and I was planning on outputting the final signal as analog from the 320D Compellor into the streaming server. Wayne suggested I use a digital signal.

However, as I was streaming from an Intel iMac, I didn't



think I had S/PDIF optical connections. At this point, Wayne told me that I was wrong - they were just hidden.

Because we would be running cables in a high traffic area, we decided to use AES copper cable -- it looks like standard XLR mic cable, but manufactured to higher standards -- from the audio rack to the streaming server. This was a distance of about 20 feet. Then, we would convert the AES signals to Toslink and connect them into the back of the iMac.

The conversion is done using the **Hosa S/PDIF Optical to AES/EBU Digital Audio Interface**. That converts the digital signals carried over copper wire to digital signals carried over fibre.

We added a short length of fiber optic cable to go from the Hosa to the back of the Mac. This created a fully-digital signal path from final signal processing in the Compellor to broadcast -- IF we could get it into the Mac.

And here is where the magic occurred.



The Microphone In and Headset Out ports of ALL Macs support BOTH optical and copper signals (digital and analog). If you plug in standard audio plugs, the ports become analog. However, there's a special Toslink adapter that turns a standard 1/8-inch miniplug into a hollow tube that light shines through. Plug this into ANY Mac and the port switches from analog to digital.

Poof! Audio quality into your Mac as high as 24-bit, 96 kHz!

Very cool.

The only problem I had was that the system worked great during our initial setup in the office. But once we got to NAB, it kept dropping the signal. We would start recording and in less than 45 seconds, the signal would drop out.

Whether this was due to a bad power supply, bad mini-plug converter, or bad Hosa unit, we did not have the time to diagnose. We instantly dropped back into analog so that we wouldn't miss deadlines.

However, this technology has the potential to be very cool and worth exploring. If I have a

similar opportunity, I'll buy the gear with a money-back guarantee a couple weeks before I need it to be sure everything is working properly.

Because when it was working, it sounded GREAT! I just wish we could have figured out how to get it to work more reliably.

[[Go to Top.](#)]

THREE NEW WEBINARS FROM LARRY COMING IN MAY



I've been hearing from people all over the world who want to attend one of my seminars, but can't. Mainly because travel is both difficult and expensive these days.

So, we've created a new series of live webinars, hosted by me, that solves that problem. (If you can't wait, [click here](#) to learn more.)

All you need is a web browser and an hour of time. We have three subjects we'll be covering in May and June:

- * Avoiding Dropped Frames -- Picking the Right Storage System
- * Prepping and Working with Still Images in Final Cut Pro
- * Making Your Video Look More Like Film

Each of these subjects generated lots of interest in my recent seminars. So we are redesigning them for an interactive web presentation.

We are offering each seminar three times, across three different days, so you can pick the date and time that work the best for you. The content for each webinar is the same.

- **Avoiding Dropped Frames**
 - Monday, May 24 at 9:00 AM
 - Wednesday, May 26th at 2:00 PM
 - Wednesday, May 9th at 6:00 PM
- **Working with Still Images**
 - Monday, May 24 at 2:00 PM
 - Wednesday, May 26th at 6:00 PM
 - Wednesday, June 9th at 2:00 PM
- **Making Video Look Like Film**
 - Monday, May 24 at 6:00 PM
 - Wednesday, May 26th at 9:00 AM
 - Wednesday, June 9th at 2:00 PM

Each webinar is limited to 100 seats on a first-come, first-serve basis. Each session will illustrate specific techniques you can put to work immediately, plus an interactive chat so you can ask questions. Each session runs one hour.

Click here to learn more and register. Pricing ranges from \$29 to \$49 per event.

I look forward to seeing you on-line! If these are successful, we plan to do a lot more of them.

[[Go to Top.](#)]

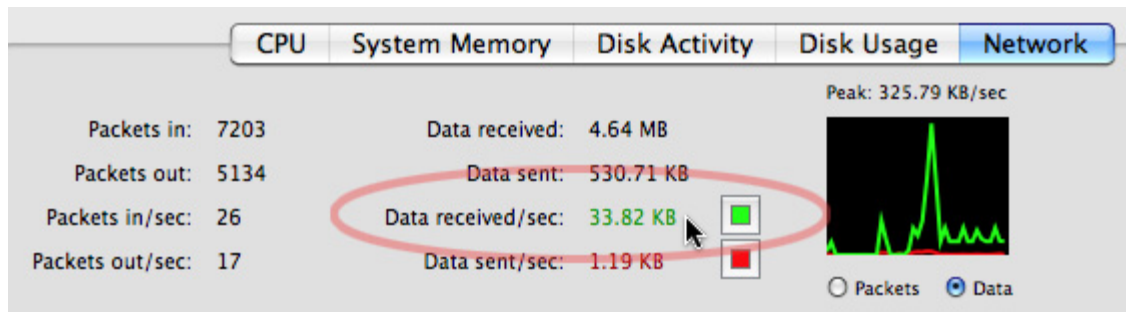
JITTERY VIDEO PLAYBACK

Recently, I had an email conversation with an editor who was having problems with jittery video playback. The editor could see a jitter in their video posted to the web, yet when I looked at the same file, but using my system, the jitter was gone.

This ruled out hardware and software problems. It also ruled out problems with the file they posted to the web. If I could see it without jitter, then it didn't have jitter in it.

So, that brought us back to the first question, what caused the jitter? Two things came quickly to mind: download speed and video codec.

If your connection to the Internet isn't fast enough, playback will be jittery. To check this, type **Shift+Command+U** to open the Utility folder. Then, open **Activity Monitor**.



Click the **Network** button at the bottom and, while playing your video, watch the green **Data received/sec** number. This shows how fast your system is downloading data from the Internet. If you encoded the video at a higher data rate, you'll get stutters and dropped frames.

NOTE: Encoding data rates are often measured in **kbps**, while data transfer speeds are often measured in **KB/s**. To convert from **KB/s** to **kbps** multiply the **KB** number by **8**.

Also, if you are trying to play H.264 video on a G-4 or G-5 you will often have dropped frame issues. H.264 is a great codec, but it takes a lot of computer horsepower to decode. If your clients are working with slower systems, you may need to encode using a different codec.

[[Go to Top.](#)]

SPOTLIGHT INDEXING

Lee Patterson sent this in:

I enjoyed meeting you in Glasgow last year.

Most of your readers will probably know this already but I thought I would share it. I have been experiencing a strange behavior for some time (my Mac, not me!)).

My iMac seemed to be pausing every 3-4 seconds, not crashing or anything drastic, just not playing video smoothly, scrolling not smooth. It was beginning to get very tiresome. To get things back to rights was pretty straightforward but involved a small sacrifice.

The MDS (Spotlight) process was manfully quizzing my external FireWire 800 drive, this is my main scratch disk for FCP. So, going to **System Preferences > Spotlight** and adding the drive to the privacy list made my life smooth once more. The sacrifice is that I no longer have Spotlight to assist with the drive.

Larry replies: Thanks, Lee. Especially on slower machines, Spotlight indexing can really slow video down.

[[Go to Top.](#)]

THOUGHTS ON VIDEO STREAMING

In March, I invited **Bill Campbell**, CEO of vacationscanada.tv to discuss his video streaming operation on the Digital Productoin Buzz. He created a custom server system optimized for video playback for his company.

One of our listeners sent in a series of questions based on his interview. I thought you'd be interested in Bill's reply.

Question 1. Mr. Campbell mentioned the importance of using a "solid video based platform". A. What is a video based platform? B. What characteristics makes a video based platform solid?

Bill: A 'solid video platform' would be a purpose built platform that focuses on video. If you visit vacationscanada.tv it is clearly a Video Platform built to deliver video content vs say a WordPress site with a video plug-in or embedded videos from youtube.

Question 2. Mr. Campbell also recommended putting clients videos on their own sites and "not embedding them". How is a video placed on a site and not embedded? I thought all video that lives on a web site has been embedded in the page.

Bill: If your 'main sales' video for example is hosted on youtube (then embedded to your site) people can watch it on youtube and other than simple stats you have limited ability track or most importantly ENGAGE the viewer from A- Z. If you can't engage them, then your chances of selling them something are diminished.

This brings us to commercialization. Youtube is for dogs on skateboards or if you are a business... for teaser videos... social marketing videos that can drive traffic to your primary sites. In my experience to put is simply, social marketing is an important first line of contact and simple engagement but save your main video for web sites YOU control - be that a Web TV Network or your main web site.

Question 3. Mr. Campbell also suggested using a "good video player" that has "good commercial opportunities". A. What does Mr. Campbell mean by a good video player? B. Are there better media players than Quicktime, Flash, and WMV? C. What does Mr. Campbell mean by "good commercial opportunities"? What characteristics make up commercial opportunities in a video player?

On vacationscanada.tv our videos (encoded in Flash by the way) have packaging directly linked to each video. You watch the 'train through the rockies' video and train packages are displayed to the right of the video. You change videos.. the packages change with you. Our click thru rates on these packages are an astounding 15% average!! People see the train and go ... wow... I want to find out more about that. The Package links go straight to product pages where people can get all the details about booking and book!. We can track a video view from Search engine keywords... to pay by credit card and eventually profile of the buyer. THIS is commercialization. THIS is a purpose built platform that you control.

If a video / package combo is not working... we can change it in minutes. Try a different package... a different price point... maybe reword the package info. If a video is not pulling on SEO we can change the keywords easily inside the Platform Dashboard or diminish its real estate.

It's a fully integrated, commercialized Video Platform with all the tools and stats.

As I discuss our platform with prospects for Web TV Networks... it's so common that they miss the linking of videos to unique packaging. It's so obvious but people look blank... and then one day they go... OH!... I get it ... this is why I think banner

ads pull poorly... the are usually too generic... designed to be on a search engine and pick off as many target markets as possible.

The platform allows a viewer engaged in content to ... well purchase exactly when they see in the video.

By the way Zacuto is an excellent example of somebody in our industry that uses video really well.... I watch their videos and just dream of being able to afford all their cool gizmos. The functionality, the design... but ouch the price!

BTW, Larry, I love your newsletter, I've been a subscriber since the early days... that NL has made "Larry Jordan" the de facto brand in FCP expertise... do advertisers know the strength of your brand or do you choose not to sell out to advertisers so much?

Larry replies: Bill, thanks for your reply. Many of the projects we create here are open to sponsorship; our seminars and the Digital Production Buzz are great examples of this. This newsletter, though, I am very protective of. I am reluctant to put ads in this publication; as long as we can find other ways to pay the rent.

[[Go to Top.](#)]

THOUGHTS ON FINAL CUT SERVER

Kit Lammers writes:

At some point I'd think it would be very valuable to your readers to talk about Final Cut Server and discuss how it works and the benefits.

We are a small operation with 3 people and it has really improved our efficiency. We now have a way for the producers to see the footage on any PC and add notes, and the editors can easily search our database of clips to find what they need instead of looking for tapes or trying to look in folders on hard drives.

I spent a few weeks and figured out how to add some fields so that every clip we log also gets assigned a show and a category. We even created a custom status for "need keyword detail" so clips that need to have more keywords put in don't get lost in the system. Then we backup everything to LTO-3 tapes.

The drawback is that it is not user friendly to setup, and I think the category field should come as a default setting. Right now we could not afford to setup an X-San so we are just running a Promise Raid connected to the server with a Gigabit switch and all our Macs have bonded network connections – (also called link aggregation). This gives us faster speeds for network transferring, in fact I think all Macs should be bonded if the switch they are connected to supports it (and it is really not too hard on the Mac side to setup).

So because we don't have an X-San we just use server as an archive to store all our media, then the editor downloads what they need for the project to a local G-Tech drive for editing. When they are done they can upload the finished project, or any other clips back to the server for storage. (yes, I know we are not taking full advantage of it – but for now it is meeting our need for a storage device that allows us to keyword and preview clips easily).

Larry replies: Thanks, Kit, for your comments.

[[Go to Top.](#)]

FAVORITE IPHONE APPS

Last month, I invited readers to send in their favorite iPhone apps for production or post. Here are some of the replies:

Ian Hart

I find **Movie*Slate** very handy as I often need a clapper to sync multi-cams and/or digital audio recorded on my Zoom. I work on my own or with a very small team and I can operate Movie*Slate with one hand (shake to iPhone to cause the slate to clap).

I bought **Storyboard** (Cinemek) with which you use the iPhone camera to construct a storyboard, then perform pans, tilts, zooms etc, rearrange your shots, add dialogue (as subtitles) etc, play in "real time" and then export to a PDF document. Very impressive app, but until now it's been more like a party trick than a serious part of my workflow.

Voice Memos is a really convenient tool for research. With a 30GB iPhone you can do very many hours of recording.

And the **camera**, of course. Just about an indispensable tool these days.

Gary Wales

My current favourite iPhone App is **Movie*Slate**. A simple yet multifunctional digital clapperboard that allows you to export/import XML files into Final Cut. A real time-saver on a shoot and can be blue tooth synced with another iPhone for multi-cam use.

Steve Schumacher

Time calculator is great if you need to add minutes and seconds, etc. Works just like a stand alone time calculator.

For pre-production and planning of shoots, **Sunrise & Set Lite** is fantastic. It tells you when the sun rises and sets, not just for today's date, but for any day you choose. Perfect for knowing in 5 months when the sun is setting.

Kit Lammers

Convert – convert any units, use for time (no time code though)

OS X Ref – Quick reminder for key commands

DipSwitch – Calculate DipSwitches

Keith Marshall

ProPrompter

This is a very cool app where I can upload/download scripts and use my iPhone as a teleprompter. If you have another iPhone/iPod available, you can use it to control the other as well.

Storyboard

This will allow you to build a storyboard, animate camera movements and export as a pdf. I was working on a project as a teaching experience to a group of teens and we used this to educate them the process of planning.

And my most favorite...

iProRecorder

I can dock my iPhone into my Alesis ProTrack and record 16/44.1k stereo or mono to my device. This acts just like a field recorder and the ProTrack allows me to plug in XLR or Phono audio source or use the built in X-Y stereo microphones

Norman Hollyn

AJA DataCalc

DVDBudget

Both of Moviola's guides: **FCP Guide** and **Pro Video**

Diana Weynand's **iKeysTo Go** is also a good alternative

And I also like **NEDi** (which is macPro Video's online tutorial guide)

Pat DeFilippo

P D Post has used **DJay** software (Mac only, \$50) for years to live- and auto-mix walk-in/walk-out music at corporate events, dance music at parties, etc. Today, DJay released **DJay Remote**, a \$5 app for iPhone/iPod Touch. You still need the full version of DJay installed on your Mac, however DJay Remote lets you completely control all of your songs with DJay's powerful functions remotely via the same Wi-Fi network that your Mac is on!

Tore Jonssen

I use **CodecCalc** and **AutoCue** all the time, works like a charm.

John Warner

I use **Focalware** on each and every location shoot to accurately predict sun and moon positions globally from sunrise through sunset anytime of the year.

[[Go to Top.](#)]

PASSING THOUGHTS

Short thoughts on a variety of subjects.

FAST DVD BURNING OF HD MATERIAL

Damon Jamal sent this:

I shoot a lot of music videos (using the sony ex-1) and often clients want a copy of the video on a playable DVD.

In your last newsletter you named three different options to do this, but a fourth (and fastest) option is to drag the exported (XDCAM sequence, in this case) .mov into Toast (I have Toast 10) and let it do the encoding and burning. The finished product is nice and is at least twice as fast as encoding with compressor or DVDSR. Time is money.

NEST WARNING

Loren Miller writes:

About nests-- remind folks they should *never* cut into a nest-- it duplicates the contents and swells memory requirements for the sequence. (I checked with the team about this to confirm it). Every time you slice into a nest-- thinking it's a quick way to extract an undesired chunk in the middle-- you create two containers of the same clips. I've called this the Sorcerer's NestMess Syndrome-- after

Mickey as the Apprentice in FANTASIA, duplicating brooms with buckets ad infinitum. First came to my attention several versions ago when a client presented a feature rough cut with many slices in nests-- and we were getting regular Out of Memory alerts!

POSTING ON KENSTONE.NET

www.kenstone.net/fcp_homepage/editors_keys_pop_booth_douglas.html

USB microphones which, while considerably less expensive, have a history of producing poor sound marked by little bottom end with a tinny top end, Fortunately, a few companies have started to address the audio needs of those editors whose pockets aren't as deep as many of the better off studios. Editors Keys is certainly one of them.

A REQUEST OF APPLE

Sebastian Guest, from Dublin, writes:

As someone that's been to one of your sessions here in Dublin, I know that you have contact at least occasionally with the Apple software design people. Have you ever sounded them out on the possibility of Color supporting real-time playback, perhaps even with audio?

A lot of the 'higher-end' grading solutions simply employ a card like the nVidia Quattro; here we have a Red Rocket (fast becoming popular for Red FCP workflows here - and it is essentially, from what I hear, a re-branded / customized quattro). As far as I know, RED supply the API's required by programmers to support this hardware - it would be a major coup for Apple (and the RED format) to support native 2k realtime playback. In fact I would hazard that even modern, run-of-the-mill graphics cards would be capable of this, they have become so immensely powerful now.

I'm a full-time colorist here in Dublin, using Apple Color; the only current alternatives run into nearly six figures... Economic downturn notwithstanding, it can prove difficult to reset the expectations of clients who are used to realtime playback on Baselight and Nucodas, even though they know those systems cost an order of magnitude more.

Many thanks for any feedback you might have on this, or for adding my 2c next time you see an apple-software head!

Larry replies: I'm happy to share your thoughts. However, Apple does not generally solicit me for advice.

[[Go to Top.](#)]

READER MAIL

PIXEL ASPECT RATIOS ARE DRIVING US NUTS

Jason Gorman, on the faculty of Nassau Community College, continues the never-ending discussion of pixel aspect ratio and still images.

If you create a 720 x 480 document and set the pixel aspect ratio in Photoshop to D1/DV NTSC Widescreen, logic would dictate that the square pixel equivalent would be 853 or maybe 864.

Not the case. It takes a 873 x 480 image with square pixels to copy and past so that it perfectly fits in the 720 x 480 widescreen format. Interestingly, whether you use 864 or 853 does not matter to Photoshop CS4, both are too narrow and both create the exact same with in the widescreen document (go figure). Where does the number 873 appear in Adobe's documentation... nowhere I could find except by confused users in this [forum](#).

Worse yet, these numbers do not hold true in Photoshop CS3. In Photoshop CS3 the widescreen pixel aspect is 1.2 (compared to Photoshop CS4's wider widescreen of 1.21) so 864 works perfectly in CS3.

Larry replies: Jason, I checked on this with Adobe and you are correct. They changed image sizes between CS3 and CS4.

However, your initial mistake was in setting the Pixel Aspect Ratio in Photoshop to D1/DV. If you set it to Square, everything works as you expect -- a 16:9 NTSC image should be created at 853 x 480 in Photoshop and will import perfectly into Final Cut Pro. This is because Adobe and Apple use different formulas to calculate pixel aspect ratios.

I haven't had time to test Photoshop CS5, but since FCP hasn't changed how it handles stills, setting your pixel aspect ratio to square means these numbers will work for all versions of FCP and Photoshop.

Here's [an article you can read](#) that provides image sizes for most common video formats.

By the way, GeeThree has software that makes handling still images in FCP a lot easier. Check into [PhotoMotion](#).

[[Go to Top](#).]

IMPORTING 16:9 VIDEOS INTO iDVD

Paul Kelleher sent this in:

I've been doing more research. Once again, here's the issue: Anamorphic videos output from FCP would not play in iDVD as widescreen, even doing the old "change 720 to 853" in QT properties (which has often been necessary in the past to get iDVD to "LISTEN")

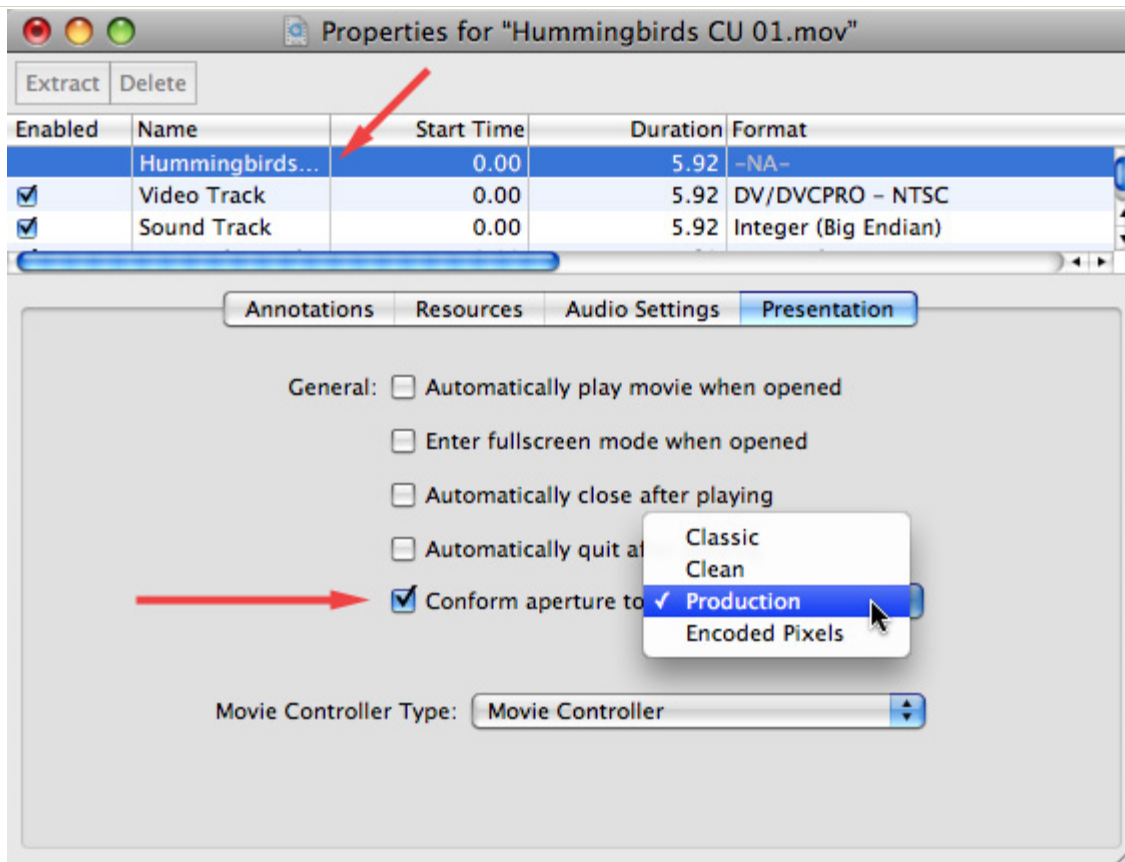
My Discovery: Aperture display modes in QuickTime.

In my testing so far- starting with the same exported source file from FCP (which displays in iDVD as squished):

I can get the video to display correctly by doing the "change 720 to 853" trick **ONLY** if the aperture display modes are CLASSIC or ENCODED PIXELS. "PRODUCTION", the default mode, is what originally displays the video at 873 (not 853) by 480. even changing to 853 in PRODUCTION mode does NOT fix iDVD- it still displays squished.

I'm going to investigate further, confirm with other source files etc, and try to actually UNDERSTAND what's occurring but that's where I am so far.

Larry replies: Paul, thanks for sending this in.



To access QuickTime's aperture settings, open a movie in QuickTime 7 Pro, not QuickTime X. Then, select the movie in the track list at the top, don't select the video part of the file. Finally, click the **Presentation** tab.

According to the article I read on Apple's support web site, the best choice for 16:9 video is **Production**. However, experimenting with all four options to see which is the best won't hurt anything. You are simply controlling how the video is displayed and imported into iDVD.

[[Go to Top.](#)]

MONITORING AUDIO

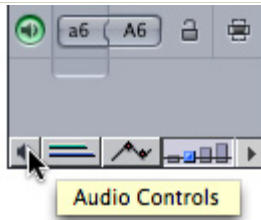
Gerret writes:

I regularly record multiple tracks of audio, and often that means that only 1 track is what I want to monitor during editing, since the others aren't as good. Is there a way to monitor only the tracks or tracks I know are good?

Larry replies: There are two ways you can do this.



Load the clip into the Viewer and click the tab at the top that contains the audio track you want to listen to.



Or, click the small button in the lower-left corner of the Timeline to turn on **Audio Controls**...



... then turn on the Solo button, so it glows red, for the tracks you want to monitor. Sadly, you can't set defaults for the Mute, Solo, or Visibility buttons.

Changing the Solo and Mute buttons have no impact on output or export, which is why I tend to prefer them over the green visibility lights, which DO control what tracks output.

UPDATE - May 7, 20120

Tom Wolsky adds:

Really? This only monitors the tab that you're viewing. That doesn't seem right. You normally hear all the tracks. The only way I know to do this in the viewer is to open the audio mixer. When the viewer is active the audio mixer displays the tracks in the viewer. At the top of the mixer sliders you can mute the channels you don't want to hear.

Larry replies: Thanks, Tom, for adding this.

[[Go to Top.](#)]

RECORDING AUDIO LEVELS

William Granzier asks:

Please correct me if I am wrong, but when recording an interview with a shotgun microphone on a DV camera set to AUTO level contro (ALC)I, the recorded audio can sound distorted, even though the record level shows that its not peaking in red. This is due to the camera compressing the audio when it gets to loud. Is that a correct statement.

I have always maintained that using ALC on a digital device is bad news as loud audio can sound distorted when it hits 0 dB. This is due to the sensitive nature of digital audio. My golden rule was rather drop the audio level and then use FCP Gain filter to lift it a bit if needed than have audio that sounds distorted.

Secondly an audio signal played into FCP through a deck is a direct representation of the way the sound was recorded and the audio levels cannot be adjusted upon import, only once imported can one the audio control in the timeline

to adjust the level.

Larry replies: Hmm... theoretically, ALC should not cause distorted audio, however, all things are possible; especially on lower-end gear.

I agree with you that, if possible, recording at a SLIGHTLY lower level without using ALC is preferable. However, recording levels below -18 are so low as to cause more problems with excessive background noise than they solve. I generally try to aim for recording around -6 to -12.

I also agree that when working with digital source, you are simply copying files from video tape to computer and no level adjustment is possible. Analog audio DOES allow adjustment during capture.

Also, something I just learned from conversations with Aphex, is that MP3 compression is optimized for maximum audio levels around -6 dB. AAC (MPEG-4) audio is designed to handle levels as high as 0 dB.

In ALL cases, **never** let audio levels go above 0 dB.

[[Go to Top.](#)]

CREATING SURROUND MIXES

Rick L. asks:

Just got your [video tutorial on using submixes](#). It answered a lot of basic questions, and is fairly easy to understand. However, I do have a quick question. Well, not so quick, I guess.

A new broadcast client of ours wants to create a highlights show out of hours of custom 5.1 surround programming. Most of it is a direct 8 channel feed, but there are some packages I will create with new music and Interviews. They have sent me QT files with a DVCPRO HD codec (720p/59.94), with 8 mono channels, and some QT animations with just 6. I think the setup they want is this based on a DVD handed to me to use as a guide-

- Ch.1- NATSOT & MUSIC L
- Ch.2- NATSOT & MUSIC R
- CH.3-ANNOUNCER/Center track
- Ch.4- LFE
- Ch.5-Copy of Ch. 1@ -10 dB
- Ch.6-Copy of Ch.2 @ -10 dB
- Ch.7-NATSOT L
- Ch.8-NATSOT R

I've been told to supply them with a QT file with 8 discrete mono channels for each segment, and an OMF project file so they can actually do the mixing and surround panning in Pro Tools. So I am not doing the final mix.

OK, so far, so good, I have set up my sequences with 8 discrete mono channels, and think to myself, all I need to do is keep the tracks consistent throughout. But here are my questions:

I am racking my brain over which is the better, easier way to deal with the audio. ..It seems like a job for Soundtrack Pro. Do I create 8 separate sub-mixes for each track and assign each audio track to a sub-mix? Then export as mono stems.? That way I can plan on adding additional tracks of music and NATSOT and assign to the correct sub-mix

Is there a way to assign an audio track, say the NAT SOT, to more than 1 sub-mix, so that it can be used for Ch.1 & 2, 5 & 6 and 7 & 8 at the same time? Or is that something I have to do after the fact?...Am I making any sense here?...

And what about that LFE track?...do I even deal with that? Or is that better left to the pro tools mix session? I don't wish to come off as ill-prepared to these people, so I am hesitant to ask newbie questions.

Larry replies: Rick, these are not newbie questions!

FCP does not support submixes. Only STP does.

The order for surround tracks is:

- Ch. 1 - Left Front
- Ch. 2 - Right Front
- Ch. 3 - Center
- Ch. 4 - LFE
- Ch. 5 - Left Rear
- Ch. 6 - Right Rear

I would set your tracks in that order, then add your two additional tracks below them. Otherwise, any professional audio mixer is going to have to spend time reorganizing your project.

You can't send an FCP track to more than one output. In other words, no submixes. If you need multiple tracks to output to the same track, you can do that. But you can't take one track and split it out to multiple outputs. Also, you can't do a surround mix in FCP.

In general, lay all your tracks into the timeline, then send the whole shebang as an OMF file to your audio post house for mixing.

[[Go to Top.](#)]

ACCESSING THE INACCESSIBLE

A reader, who prefers to go nameless, managed to lock herself out of her computer by, um, changing the permissions on her boot disk. Dead in the water. The OS won't even boot.

(After the obligatory screaming and yelling, we both agreed that this was a bad way to start the day...)

Anyway, here's how she fixed the problem.

I thought - hmmm what can I do to outfox this...hmmmm.

I tethered the laptop to another computer by connecting them via FireWire and rebooted the locked-up computer while pressing the letter **T** during startup.

The locked-up computer showed up on my other computer as a hard disk.

Clicked **Command+i** on the system folder and got the info screen.

Changed the permissions in the system folder on my laptop back to where they should be and shut down both systems.

Rebooted and here I am

Whew!!!!!!

The moral of the story is - don't lose your laptop because ANYONE CAN ACCESS IT!

Larry adds: The FireWire tethering is a great trick that I often forget. And you are correct, if you lose your hard disk, someone else can access it.

[[Go to Top.](#)]

WHAT TO BUY, WHAT TO BUY...

Michael Fawcett asks:

Now more than ever there are a lot of what I would consider great analog SD cameras up for sale as shooters move to HD rigs.

My question is that will the older cameras with there larger chips and better lens systems deliver a better picture than the newer digital counter parts as far as SD is concerned?

Larry replies: My feeling is that a large sensor SD camera with a good lens will look better than a small sensor HD camera with a bad lens, when both are converted to SD video.

However, I suspect other readers will have different opinions...

[[Go to Top.](#)]

AUDIO SYNC DRIFT

Art Humphrey asks:

I recently bought an external Lacie BluRay burner and Toast 10 to make an HD disk of an 11 minute production. The video looked wonderful but the audio gradually went out of sync as the program progressed. Do you have one of your articles that addresses this issue?

Larry replies: No. However, audio drift is almost always caused by a mismatch between video frame rate or audio sample rate.

Be sure to use a video frame rate -- 23.98 not 24, 29.97, not 30. And be sure to use an audio sample rate of either 44.1 kHz, or 48 kHz.

[[Go to Top.](#)]

PAINTING THE WALLS

Sam Shirakawa asks:

In one of your tutorials/articles on color correction, you address the matter of the right shade of gray for walls in editing suites. One of my editing suites may soon be in my studio apartment in Cologne! TAH-TAH! As you might say. In any event, could you please tell me what is the correct shade/code/letter for the paint in an editing suite? Must ALL walls be painted the same shade? Or only the wall that would be behind the color correction/reference monitor? Is daylight permissible in moderation? Or must windows be opaque or covered? Note, I'm talking about my apartment, that has to serve other purposes, such as entertaining.

And where/how do I find a swatch with the correct shade. The web is not too helpful along these lines, but maybe I'm overlooking.

Larry replies: Sam, I went right to the source and sent your question to [Alexis Van Hurkman](#) - a renowned author and colorist.

Alexis writes:

The answer is fairly straightforward, and there's both a SMPTE recommended practice paper and a Sony Monitor Technology PDF that covers the highlights. To summarize, it's recommended that the wall surrounding (behind) the monitor be the one treated specially, that an area roughly 9x the monitor face (I like to simply say "within your field of view when you're looking at the monitor) be neutral gray, and that the color be completely desaturated. There's no firm rule about whether it should be a lighter or darker gray, although many simply assume 18% kodak gray (from the standard photo chip chart). However, that's simply a preference, and I personally prefer a slightly darker shade. You can take a photo chip chart into a paint store that can scan chips and do custom mixes (make sure they're reputable and accurate).

Light control is important, the main thing is you want a bit of light illuminating the surround wall behind the monitor (technically 10% of the monitor displaying a white field) that's the same color temp as the monitor (6500K, D65), and no light should reflect directly on the surface of the monitor, because it will cause the apparent contrast of the monitor to diminish.

The only other advice I'd give is not to put anything super-colorful on the wall opposite the monitor, it might reflect off the front of the monitor and cause problems.

By the way, I'd appreciate it if you'd mention that all this information (and much more) is going to be coming out in my new book, "[Color Correction Handbook: Professional Techniques for Video and Cinema](#)" (Peachpit Press). Due out in August.

Larry adds: Thanks, Alexis, for taking the time to answer this!

[[Go to Top.](#)]

A NEW KEYBOARD SHORTCUT

Lee Patterson sent this in:

Prepping for my FCP exam this coming wednesday (help!) I made a discovery, hold down **K** and then **L** or **J** for slo-mo , nothing new there.

However, hold down **K** and then **L** or **J**, then press and hold **Shift**, then release the JKL keys, *then* release **Shift** and you have continuous, hands-free slo-mo:)

Not very useful, but kinda interesting:) I thought it would be worth sharing.

Larry replies: This is very cool. The use of the J-K-L keys we teach in class. But the addition of the Shift key, I didn't know. Nice!

Before we wrap up this issue, I have three questions that I don't have answers for. Take a look at the next section. Send me the answer and I'll pass it along.

[[Go to Top.](#)]

QUESTIONS LARRY NEEDS HELP WITH

If you know the answers, let me know and I'll add them below. Thanks!

Scott McVeigh asks:

Why can't I digitize 4 audio channels thru firewire from my DVCPRO-50 tapes on

my SD93 deck into FCP?

It works fine with my AVID and until I connect the deck it looks like it will work fine with FCP. But when I connect the deck the channel options turn gray.

UPDATE - May 7, 2010

Tom Wolsky adds:

This can't be done in FCP.

Larry replies: Thanks, Tom.

Brad Boim with the NFL Network asks:

Is there any way to drag a file from iTunes directly into FCP? The answer seems to be no, but it seems like a simple interaction that should exist given the fact that both programs are used together in a number of ways.

All audio files are AIFF, we are running FCP 6.0.6, and we are using different versions of iTunes.

Larry replies: Hmm... I thought this would be simple, but I can't do it. Anyone have any ideas?

UPDATE - May 7, 2010

Arthur Bell, **John King**, and **Cole Prine** all sent me this:

You may already know this, but the only way I know -- Right mouse click in iTunes playlist - **SHOW IN FINDER**, or type Command+R, and drag from that revealed folder into FCP bin folder

Larry continues:

This is a good option, but Martin Baker, of Digital Heaven, sent the best answer.

Martin Baker writes:

Larry, dragging tracks from iTunes into FCP was only introduced in FCP 7.0.2 and of course it won't convert mp3 or aac files. The best option is to use Loader, which we publish - www.digital-heaven.co.uk/loader.

Larry adds: Duh! Loader is a great program. I'm embarrassed to admit I forgot it. Thanks!

Bruce Himmelblau adds:

After you use the choose "Show in Finder" option you should drag it to the **Project Name / Media / Music** folder on the external drive that you created to store your project. If you just put the file in your Browser, it's still on your system drive. In case the project gets re-assigned, they may not have access to your system drive.

If the file isn't in AIF 48K format, you can use QuickTime Pro to convert it.

Larry replies: Thanks for adding this Bruce.

UPDATE - May 9, 2010

Shawn Brady adds:

Here is a work around I found that is faster than drilling down a million folders.

1. (This is a cool short cut unto itself.) In Final Cut, hold down **Option + Command** and you can click and drag right in the middle of the 'Viewer' window to move it. No more clicking on the menu bar. Just drag the Viewer window out of the way to the right a little bit. You'll have hole right to your desktop. iTunes may be behind Final Cut.

2. Click on the iTunes song, Press **CMD+R** (Show in Finder) and the Finder window pops up, then drag from the Finder right to the Timeline or a bin in the Browser.

3. As an option, when you drag the file from the finder to Final Cut, if you hold **Option** key and click anywhere in Final Cut, you will hide the Finder when you go back into Final cut, iTunes will still be right underneath Final Cut so if you have to do more file imports from iTunes, the pesky finder window will already be out of the way for you.

Now, how cool is that?

Larry replies: Thanks, Shawn, for the additional keyboard shorcuts.

Loren Miller asks:

Big question about big frames in Browser Frames view-- has anyone out there managed a way to magnify Bin frames so they're actually fun to view? Even Large is inadequate on today's high-res monitors. Can a third party app tackle this?

Larry replies: Loren, good question. And I have no answer. Anyone?

UPDATE - May 7, 2020

Tom Wolsky adds:

Reduce your monitor resolution is the only way I know.

Larry replies: Thanks, Tom.

[[Go to Top.](#)]

WRAP-UP

Well, that's about it for this issue. I'm still wading thru all the email, I'll have more answers in my blog.

For current news and in-depth interviews on what's happening in our industry, be sure to listen to the [Digital Production BuZZ](#) every week. In fact, **put the free BuZZ player** on your web site! It's fast, simple, and very cool.

- [Buy a tutorial - decrease your stress and get back to work.](#)
- [Or, buy a mouse pad -- you know you need a new one...](#)

Also, please continue [sending me your comments](#) and questions. I love hearing from you and enjoy the conversations that develop around your comments.

Until next month, take care, and edit well.

Larry



Subscribe to **Larry's *FREE***

Monthly Newsletter!

Email:

[[Click here for a printer-friendly PDF version of this issue.](#) 2.0 MB]

Legal Notes

The newsletter is free -- but does require a subscription. Please invite your friends to sign up at www.larryjordan.biz/newsletter.

To unsubscribe, simply send me an email and I'll remove you from the list. This list is not sold, rented, or bartered. The only person who knows you are on this list is me.

The information in this newsletter is believed to be accurate at the time of publication. However, due to the variety of possible system and software configurations, the author assumes no liability in case things go wrong. Please use your best judgment in applying these ideas.

The opinions expressed in this newsletter are solely those of the author. This newsletter has not been reviewed or sanctioned by Apple or any other third party. All trademarks are the property of their respective owners and are mentioned here for editorial purposes only.

Text copyright 2010 by Larry Jordan & Associates, Inc. All rights reserved. This newsletter may not be reproduced or published in any way, in whole or in part, without specific written permission from the author.

Links to my home page, blog, or web site articles are welcome and **don't** require prior permission.

[Home](#) | [About](#) | [Final Cut Studio Training](#) | [Final Cut Studio Tips & Articles](#) |
[Goodies](#) | [Products](#) | [Email Support](#) | [Contact](#)

© 2010, Larry Jordan & Associates, Inc. All rights reserved. info@larryjordan.biz